

List of tasks:

- Core team to fix convection and re-run GISS/CCM3 with OH from Mich.-
- Mich. compare to data
- Core team to develop GMI version with FVGCM met fields with full fields in trop + strat fields—and run with aerosols in this model—TIMELINE?
- Michigan compare OH used in GMI aerosol model with OH calculated in tropospheric model
- As soon as possible: core team to run all met fields with offline OH, NO₃, O₃, HO₂, JH₂O₂ from respective trop. model
- We would like the tropospheric model team to use our aerosol fields
- Michigan to compare RH in CCM/GISS fields with satellite obs—consider comparison with ECMWF reanalysis fields
- Michigan to calculate radiative forcing
- Michigan to write description paper and intercomparison paper

As soon as possible:

- Michael/Debra to give data set for microphysics tests to Goddard for web site-MI/AER
 - Debra to provide benchmark AER results with Fitzgerald nucleation and Vehkemaeki scheme
 - Michael to provide set of plots that he's done
 - Peter Adams to compare TOMAS to test cases

As soon as convection fixed:

Core team (Bijani) to run aircraft + surface soot for 4 met fields (12 runs for 5 years each)

Prather to run GISS but with 2nd order moments

- Baughcum to provide parametric aircraft soot sources for 2020 and to examine accumulation for varying emissions from 9-11, 11-13, 13-15
- Michigan to estimate forcing for different runs
- Baughcum to take lead in writing intercomparison paper

- **NEXT STEPS:**

- Core team: Will begin addition of UMaer Microphysics in January
 - (Paper comparing use of UMaer model with 4 met fields: Documentation + uncertainty due to met fields??)
 - Reconsider whether better to use all 3 microphysics modules in this study – depends on timing

- **As soon as possible:**
- Debra, Xiaohong, Peter to coordinate input/output from aerosol module to GMI so that GMI only needs to deal with a single interface
- **After addition of Michigan microphysics:**
- CORE team to add AER, and TOMAS microphysics models to GMI
- CORE team to add OCS (with Debra, Michigan) and to create an aerosol version of COMBO model
- Debra, Peter, Michigan examine stratospheric aerosol in aerosol version of COMBO model.

Proposed work

- Coupled chemistry/aerosol model with volatile components, improvement of nucleation schemes and addition of width as a prognostic variable
- Others?